Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A device for simulating slip of a wheel on a vehicle test bench according to the equation $F_R = F_A \times C$, wherein F_R is a frictional force, F_A is a contact force of the wheel, and C is a coefficient of friction, the device comprising:

a movable test surface to simulate rolling conditions of a wheel which contacts said test surface with a contact force F_A;

means for changing the contact force F_A in a predetermined manner; and

a wheel adapter operable to couple said means for changing the contact force F_A to said wheel while the wheel is mounted on a vehicle and so as to rotate with said wheel relative to said means, whereby said wheel is tested in a mounted location on the vehicle.

2. (previously presented) The device for simulating slip of claim 1, wherein the means for changing the contact force F_A comprises a lifting and lowering device.

3. (previously presented) The device for simulating slip of claim 2, wherein the lifting and lowering device can vertically adjust a hub of the wheel while the wheel is rotating.

4. (previously presented) The device for simulating slip of claim 2, wherein the lifting and lowering device holds the wheel with a holding force and is controllable by one of hydraulic pressure, electrical signals, and linear motors, the device for simulating slip further comprising means for measuring the holding force, whereby the holding force can be used to determine the contact force.

5. (previously presented) The device for simulating slip of claim 2, wherein the lifting and lowering device can follow a tracking/steering angle and a kingpin angle of the wheel, whereby the lifting and lowering device can secure the wheel in a direction transverse to the direction of travel.

6. (previously presented) The device for simulating slip of claim 2 further comprising:

a bearing unit rotatable about a pivot axis extending transversely to an axis of rotation of the wheel adapter so as to change the track of the wheel, the wheel adapter being rotatably arranged in coupled to the bearing unit;

a mount pivotably mounted to joint blocks;

a plurality of connecting arms connecting the bearing unit to the mount;

linear drives for lifting and lowering in the joint blocks in linear guides in a predetermined way;

a supporting block on which the linear guides and the linear drives are arranged; and

a base plate for attaching the supporting block to an underlying surface.

7. (previously presented) The device for simulating slip of claim 1, further comprising means for changing the coefficient of friction.

8. (original) The device for simulating slip of claim 7, wherein the means for changing the coefficient of friction comprise a nozzle for introducing water between the wheel and the surface of the test device.

9. (previously presented) The device for simulating slip of claim 2, further comprising a controller for controlling the lifting and lowering device, the controller being integrated into a controller of the vehicle test bench.

10. (previously presented) The device for simulating slip of claim 2, further comprising a plurality of lifting and lowering devices for respective wheels, and a controller for connecting the lifting and lowering devices.

11. (original) A method of simulating slip of a wheel on a vehicle test bench comprising a movable test surface for simulating rolling conditions of a wheel which contacts said surface with a contact force F_A, said method comprising displacing the contact force F_A

from the wheel to a lifting device in a predetermined way by lifting the wheel off the surface as the wheel rotates.

12. (previously presented) The method of simulating slip of claim 11, further comprising:

completely displacing the contact force F_A from the surface to said lifting device by lifting the wheel completely off the surface;

determining the absolute value of the contact force F_A by means of a measuring device while said wheel is completely off said surface;

determining a maximum traction force F_Z which can be transmitted to the surface based on said absolute value;

calculating a coefficient of friction C with the equation $F_Z = F_A \times C$, where F_A is the absolute value; and

setting the friction force F_R according to the equation $F_R = F_A \times C$ by controlling the contact force F_A.

13. (previously presented) The method of simulating slip of claim 12, wherein said maximum tractive force F_Z is changed in accordance with a predefined test program.

14. (previously presented) The method of simulating slip of claim 12, wherein said coefficient of friction is changed in accordance with a predefined test program.

15. (previously presented) The device of simulating slip of claim 1, further comprising a bearing unit coupled to said means for changing and to said wheel adapter so that said wheel adapter is rotatable relative to said bearing unit.

16. (previously presented) A device for simulating slip of a wheel on a vehicle test bench according to the equation $F_R = F_A \times C$, wherein F_R is a frictional force, F_A is a contact force of the wheel, and C is a coefficient of friction, the device comprising:

a movable test surface to simulate rolling conditions of a wheel which contacts said test surface with a contact force F_A;

means for changing the contact force F_A in a predetermined manner; and

means for changing the coefficient of friction.

17. (previously presented) The device for simulating slip of claim 16, wherein the means for changing the coefficient of friction comprise a nozzle for introducing water between the wheel and the surface of the test device.